

Summer School of Science

FOR THE

ATLANTIC PROYINCES OF CANADA

July 7th to July 22 nd, 1897
YARMOUTH, N. S.

BOARD OF DIRECTORS

President, Secretary-Treasurer, and Faculty of Instructors.

Principal and Faculty of Normal Schools.

Inspectors of Schools.



Charlottetown, P. E. Heland
HASZARD & MOORE, QUEEN SQUARE
1897

1897 (57)



Summer School of Science

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BOTANY

Prof. J. Brittain...... Normal School, Fredericton, N.B. CHEMISTRY W. H. Magee, Ph.D..... High School, Parrsboro', N.S. CIVICS J. B. Hall, Ph.D. Normal School, Truro, N.S. EXPRESSION ENGLISH LITERATURE A. Cameron County Academy, Yarmouth, N.S. FIELD WORK Prof. J. Brittain......Normal School, Fredericton, N.B. GEOLOGY AND MINERALOGY Prof. A. E. Coldwell, M.A. Acadia College, Wolfville, N.S. KINDERGARTEN Mrs. S. B. Patterson..... Model School, Truro, N.S. MUSIC (Tonic Sol-Fa) Miss A. B. Hilton...... Central School, Yarmouth, N.S. PSYCHOLOGY Prof. W. C. Murray, M.A.. Dalhousie College, Halifax, N.S. PHYSICS AND METEOROLOGY W. R. Campbell, M.A......County Academy, Truro, N.S. PHYSIOLOGY AND HYGIENE E. J. Lay...... County Academy, Amherst, N.S. ZOÖLOGY AND ENTOMOLOGY G. J. Oulton, M.A..... High School, Moncton, N.B.

W. A. HickmanPictou, N.S.



Summer School of Science

FOR THE ATLANTIC PROVINCES OF CANADA

1897

OBJECT

ing teachers and others the opportunity of combining the study of some specialty with the rest and recreation of a delightful and *inexpensive* two weeks' outing.

OPENING

The opening exercises of the School will be held on Thursday, July 7th, at 8 o'clock, p. m., the programme for which will consist of addresses, music, etc.

LOCATION

The Summer School of Science of '97 meets at Yarmouth. The best view of the town, harbour and surroundings may be seen from the summit of Bay View Park (a private enterprise of Hon. L. E. Baker), which is situated on an elevated peninsula—almost an island—in the middle of Yarmouth Harbour. Two miles to the south surges the Atlantic Ocean, while half a mile west the Bay of

Fundy tumbles its waters upon a sandy bar and a rocky Between these waters Cape Forchu, with its fogalarm and lighthouse, pushes its rocky prongs warningly far out to sea. Northerly extends Chegoggin Marsh, of three hundred and twenty acres, originally a pond, concerning which, when the sea had been shut out by a dyke, the Indians in their wonder exclaimed, "What pale-face fill pond with mud?" North-east and east, in full view, are Milton and Yarmouth, now grown into one incorporated town. Prominent in the midst of many fine buildings, the Seminary, a fitting monitor of the situation, occupies a commanding site in the centre of the town. harbour there are a few islands near at hand, the largest of which is Bunker, and concerning which there are interesting stories of early settlement. Here we find the Marine Hospital, remains of old forts, and tumuli or French burying grounds.

There is an admirable opportunity about the shores of Yarmouth Harbour for the practical study of the fascinating subject of marine erosions. Bay View presents illustrations of that subject, and still better Cape Forchu. The rocks of Yarmouth, though not fossiliferous, present many features of interest from a mineralogical, lithological and stratigraphical standpoint. They show many varieties of metamorphism, and many minerals as the result of such metamorphism. Among them are mica, hornblende, staurolite, garnet and titanic ore, all of which are readily obtainable, often in very interesting forms. The stratification, foldings and displacements are also admirably exhibited in the coast sections. Chegoggin Point and Cream Pots are remarkable both for their picturesque character and as illustrating the features of the gold-bearing Cam-

brian series of Nova Scotia. Brazil Lake and Lake Annis abound in garnets and staurolites. Not far distant are Petite Passage and Digby Neck, concerning which Prof. Bailey has said, "Here the scenery is not equalled elsewhere upon the Atlantic seaboard, not even by Blomidon."

On the shores of the harbour splendid specimens of marine plants and animals abound, and round about Sunday Point and Tusket Islands are many kinds of sea birds. From a botanical standpoint Yarmouth is well favoured. Everything that grows here at all grows well. The hawthorne hedges and grassy lawns are the admiration of all who see them.

Star-gazers will find that from the cupola of the Seminary the sea horizon presents an arc of one hundred and twenty degrees.

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Port Maitland and Tusket Lakes are the rendezvous of suburban lovers. At the former place there is a beach of hard sand, unexcelled by any in Nova Scotia, and from which the tide recedes a great distance, leaving a large inviting area for a spin upon the wheel. Cyclists are loud in their praises of Yarmouth roads because there are no huge hills and very little sand. This is merely a suggestion to those who have wheels and desire to cover much ground in Yarmouth. It is proposed that when the weather permits, some of the classes meet in the shade of Bay Here the environment is of such varied loveliness that for this reason alone the session of '97 will doubtless linger pleasantly in the memories of all who may attend; and the fact that the most cordial invitation of His Honor the Mayor and the Town Council has been extended to the Summer School of Science to meet at Yarmouth, bespeaks for all who accept the invitation a right royal welcome.

CLASS WORK, LECTURES, EXCURSIONS, ETC.

The class instruction is given, for the most part, between nine and three o'clock, leaving the remainder of the afternoons for field work, etc.

A series of Round Table Talks will be held in the evenings. Lectures, and a Concert, will also be arranged for. These will be both instructive and entertaining.

On Saturdays, excursions will be made to attractive localities—one to Tusket Islands amidst "scenery sublime," another to Tusket Lakes and Port Maitland.

EXPENSES

Each student is charged a registration fee of \$2.50, to be paid to the Secretary-Treasurer when the student enrols. This registration fee entitles the student to admission to all the ordinary classes. An additional fee of \$2.00 per subject will be charged for advanced classes, to be paid to the Instructor.

BOARD AND LODGING

Board can be secured for from \$3.00 to \$5.00 a week. To secure board at these rates, application must be made to the Local Secretary, George H. Cain, Esq., Yarmouth, N. S., not later than June 1.

RATES OF TRAVEL

Reduced rates will be given by all Steamship and Railway Lines, full particulars of which will be published in the *Educational Review*.

Persons travelling by the Intercolonial Railway, the Dominion Atlantic Line, or the P. E. I. Steam Navigation

Company's Boats, must procure from the Agents, when purchasing their ticket, a *Standard Certificate*, to entitle them to reduced rates.

Arrangements have been made for trip from St. John, N. B., and return, by boat, for \$2.50.

Steamboats run weekly between Yarmouth and Boston, Mass., and it is anticipated that a very cheap rate can be arranged for. Any further information can be procured on application to the Secretary, J. D. Seaman, Charlottetown, P. E. Island.

ADVANCED CLASSES

Provision is made for advanced work in the different subjects. To ensure the formation of advanced classes, it is imperative that students send their names and subject to the Secretary not later than May 1st. In the past it has been found that students came to the School desiring advanced work, but not having given previous notification it was impracticable to undertake the work. For advanced work there will be a charge of \$2.00 in addition to the registration fee. In the advanced courses, Instructors will give personal attention to students. The time will be two hours a day, work severe enough to demand all a student's attention for the two weeks of the School.

CERTIFICATES

Certficates, as implied by the Course of Study, will be awarded after a reasonably strict examination. It shall be the duty of the President and Secretary to conduct these examinations, associating with them in each department the Lecturer on that subject.

For examination purposes, the work in each Natural

Science subject will be divided into three sections of equal value, as follows: (a) Prescribed text-book and lectures: (b) Practical and original work, such as dissecting, experimenting, etc., in the laboratory: (c) Collections, Mountings, Apparatus. The purpose of this arrangement is to lay the chief stress on real knowledge of a practical character, rather than on knowledge derived chiefly from text-books. The lectures and demonstrations during the session of the School are intended especially to elucidate the facts and principles that are more or less obscure, and to exhibit the best methods of teaching Elementary Science.

NOTIFYING

Intending students should notify the Secretary not later than June 1st, of their intention to attend the School and the subjects they purpose studying. Attention to this would materially assist in organization, and enable the work to be begun in the several classes without any loss of time—an important consideration when the session of the School is so short.

LABORATORY

All laboratory work will be done by aid of the simplest equipments, such as are within the reach of the common schools of the Maritime Provinces.

NOTES

The Summer School of Science for the Atlantic Provinces of Canada, enjoys the honorable distinction of being the only one of its kind in the Maritime Provinces.

It will have this year an attractive location, on the Atlantic Coast, where the delightful sea-breezes have full play.

In the number and character of Instructors, in the variety of subjects, in the plan of work, in outside attractions, the Summer School of Science offers strong inducements to students to attend.

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The School is not a Convention with a miscellaneous assortment of essays and addresses, but a School in the best sense of the term. The work is all carefully planned and systematically conducted. Students invariably say that much more and better work is done than is promised.

ATTENDANCE

The attendance at this School is made up of-

Teachers who feel the need of professional quickening. Teachers without experience who wish to make available the experience of others.

Teachers of ability and experience who are anxious to meet and hear others of like or greater experience.

Teachers who are to take up a new line of work, or who need to freshen themselves in some one branch of study.

Young people who wish to use the vacation to improve themselves in some branch or branches of study.

Specialists desiring to gain breadth and depth in one or two lines of work.

Wide-awake teachers who desire and deserve promotion.





Course of Study

FOR THE ELEVENTH SESSION, 1897

ASTRONOMY

In this subject no regular course is laid down, but should the weather be favourable, several evenings will be devoted to *star-gazing*, when Principal Cameron will give some elementary talks on the heavenly bodies then visible, and answer all reasonable questions which a desire for knowledge can suggest.

(SEC.)

BOTANY (Ordinary)

PLANTS

- 1. Their Forms and Gross Structure.
- 2. Their Minute Structure.
- 3. Classification.
- 4. Reproduction.
- 5. Reproduction.
- 6. Chemical Composition.
- 7. Food.
- 8. Growth and Assimilation.

BOTANY (Elementary)

1. Roots, Stems, and Leaves.

2 and 3. Flowers—their Forms and Structure.

4. Infloresence.

5. Fruits-their Development and Structure.

6. Seeds-their Structure and Forms.

7. The Compositæ.

8. The Gymnosperms.

Each Student should bring a copy of Spotton's Botany or of Gray's Manual.

(I. B.)

CHEMISTRY (Ordinary)

1. Matter. Energy. Cohesion. Chemical Affinity. Elements and Compounds. Symbols and Formulæ. Reactions and Equations.

2. Preparation and Properties of Oxygen. Oxidation.

Combustion. Oxides. Ozone.

3. Preparation and Properties of Hydrogen. Synthesis and Analysis of Water. Properties of Pure Water.

4. Positive and Negative Elements. Radicals. Acids.

Bases. Salts.

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5. Preparation of Acids and Bases.

6. Preparation of Nitrogen. Oxides of Nitrogen. Nitric Acid. Nitrates.

7. Carbon. Allotropic Forms. Preparation of Oxides. Carbonates.

8. Chemistry of the Atmosphere. Relation to life.—or the Halogens. Preparation. Properties. Uses.

(W. H. M.)

CHEMISTRY (Advanced)

A course in Introductory Organic Chemistry will be offered to those who have a fair knowledge of Inorganic Chemistry.

(W. H. M.)

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CIVICS

- 1. Introductory. Government-building in the British North American Colonies. Canadian Patriotism.
- 2, 3, 4 and 5. Legislative, Executive and Judicial Functions of Government in the different political divisions in Canada, e.g., School Section; Town; County; Province; Dominion,
- 6. Brief discussion of the Canadian Constitution, with reference to the following: Governor General; Senate; House of Commons; Cabinet; Executive Department; Judiciary.
- 7. Some points of Comparison noted between the Constitution of Canada and that of the United States.
- 8. Coats of Arms of the different Provinces, and the Canadian Flag.
 - 9. Patriotism in the Home and in the School.

(J. B. H.)

EXPRESSION

VOCAL AND PHYSICAL CULTURE, READING

The Physical exercises are arranged for the promotion of health and strength, while they also develop an easy and dignified bearing, graceful carriage and the power in the body to express *thought*. The body is educated as the servant of the mind.

Vocal Culture.—Attention is given to proper placing of tone, to direction and quality of tone produced, and to correct diaphragmatic breathing. The voice is recognized as the most direct means for the expression of thought, and is educated on this basis.

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Reading.—To read well one must be able to so present the thought of the author that it will interest and benefit those to whom he reads. Attention is given to the clear and distinct presentation of the subject as a whole, from the standpoint of the author, to a literary analysis of that subject, to Articulation, Inflection, &c., &c.

The work is arranged that it may be of practical assistance to teachers of both higher and lower grades.

(M. A. R.)

Books used: Evolution of Expression, Vol. I., by Charles W. Emerson, M.D., LL.D., President of Emerson College, Boston. Price, 50 cents. (Please also bring Fifth Royal Reader).

In addition to the regular class work, private lessons will be given to individuals desiring them, or to classes of four or six. Terms, \$1.00 an hour.

(SEC.)

ENGLISH LITERATURE

The Class of '97 will read and talk over the following poems of Browning. I think (but am not sure) that they are all or nearly all contained in Rolfe's edition.

Notes and queries from any who are studying these poems will be gladly received at any time if addressed to P. O. Box 101, Yarmouth, N. S.

Home Thoughts from Abroad. Home Thoughts from the Sea. The Lost Leader. My Last Duchess. The Tomb in St. Praxed's. Clive. Pippa Passes.

(A. C.)

FIELD WORK

The Class will accompany the Instructor to the fields, groves and shores, where they will engage in the general observation and study of natural phenomena, and of natural things—minerals, plants and animals. Students are requested to bring to the School any books they may have which might be helpful in these investigations. A good text-book in Botany—Spotton's, or Gray's larger text-book—will be especially useful.

(J. B.)

GEOLOGY AND MINERALOGY

This Course will be adapted to beginners, and none need be deterred from taking it through lack of previous preparation. The object will be to enable the student to determine common rocks and minerals. The following course will be followed:

- 1. Introduction and Definition. Elements and binary compounds used in rock-making.
- 2. Silicates, their composition and importance: basic and acidic components, etc.
 - 3. How rocks are formed. Classification of Rocks.
- 4. Physical properties of minerals; color, lustre, hardness, specific gravity; importance of these illustrated by specimens.
- 5. Ores, what they are and how they may be distinguished by blow-p pe tests.
 - 6, 7 & 8. Practical work in determining minerals.

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PREPARATORY WORK.—The student should study Crosby's "Rocks and Minerals." He should familiarize himself with the use of the blow-pipe, and should make collections of the rocks and minerals of his neighborhood, one set for his own cabinet, and one for the Summer School, noting carefully the locality. Specimens should be neatly trimmed to the size of about 2 x 3 inches.

Suggestions.—Study Shaler's First Book in Geology; or Dana's Geological Story briefly told. Observe carefully the action of water in the brooks in your neighborhood in wearing away earth in one place and building up in another. Collect, classify and name specimens found in your locality, such as sand, soils, shales, slates, sandstones, conglomerates, fossils, &c. Form small cabinets for the purpose of exchange.

In the examination of physical and chemical properties of minerals, special attention will be given to color streak sp. gr., hardness; and blow-pipe reactions, and the object aimed at will be the systematic determination of species by these tests. Crosby's Key to Mineralogy and J. R. Dana's Physical Mineralogy and description of Species will be used as text books.

Students should provide themselves with apparatus for ascertaining the physical and chemical properties of minerals.

Apparatus.— For hardness.— File, piece of glass, pocket knife and copper coin.

For Streak.—Piece of porcelain.

For Structure.-Pocket lens.

For Chemical Tests.—Small bottle of hydrochloric acid, blow-pipe, lamp, forceps, 3 inches of platinum wire,

charcoal, a number of open and closed tubes of hard glass, three small bottles containing borax, soda and microcosmic salt, a small magnet.

Crosby's Determinatis Mineralogy, send to Prof. Crosby, Technological Institute, Boston.

(A. E. C.)

KINDERGARTEN

Of course, within the limited session of the Summer School of Science, no attempt can be made to train Kindergartners; but kindergarten principles will be so fully explained and illustrated as to show how they may be successfully applied in the common schools.

The knowledge imparted to the child does not become faculty or power, nor can it be regarded as a permanent possession, until he has made some personal use of it; therefore spontaneous self-activity, as well as instruction, is an indispensable element in education. Suggestions will be given, showing how this self-activity may be aroused and strengthened so as to aid the child's mind in the assimilation of new knowledge.

Nature strictly appeals to the child's sympathies, awakens his interest, and leads him not only to observe but to think. Illustrations will be given to show how it may serve also as a basis for reading, drawing and cultivation of language, and in various other ways serve important educational purposes.

Child-study for the teacher, and nature-study for the child are foundation principles in successful teaching.

Special instructions will be given, if desired by any students, in Paper-folding, Paper-cutting, Clay-modelling, and other Kindergarten occupations.

(S. B. P.)

MUSIC (Tonic Sol-Fa Notation)

ELEMENTARY CLASS

Correct Methods of Breathing, and Hints on Voice Culture.

The Tones of the Scale in the three principal chords and in connection with one another—Their Mental Effects and Tendencies—and the Manual Signs.

The Modulator—Its Uses—First, Second and Third Step Voluntaries.

Time as related to Accents—Time Names—Elementary Rhythms and their Effects—Different Measures and Simple Divisions of the Pulse.

Ear Exercises, in Time and Tune.

Simple Two-Part Songs.

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Books: Companion for Teachers (Curwen), 30 cents; Graded Time Exercises (new edition).

INTERMEDIATE CLASS

Only for those holding the Elementary Tonic Sol-Fa Certificate, or who are prepared to pass the examination for it.

Structure of the Common Scale — Chords and the Principles of Harmony.

Transition-Second and Third Removes.

Modulation—Modes—The Relation of the Major and Minor Modes, and Modulation from the one to the other.

Time-More Difficult Rhythms.

Ear Exercises in Time and Tune.
The general work for the Intermediate Certificate, and for the Elementary Theory Certificate.

The Relation of Tonic Sol-Fa to the Staff Notation.

Special attention will be given in both classes to Tonic Sol-Fa principles and how to teach the System.

Books: Companion for Teachers (Curwen), 30 cents; Musical Theory (Curwen), 10 cents; Graded Time Exercises and Minor Mode Phrases (new editions); The School Music Teacher (Evans and McNaught), 75 cents.

Students can receive private lessons, \$1,00 per hour. Junior and Elementary Certificates will be granted to all who succeed in passing the necessary examinations.

Candidates for Certificates should make as much previous preparation as possible.

(A. B. H.)

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PHYSICS AND METEOROLOGY

Physical properties of matter, such as Density, Porosity, Divisibility, Cohesion, Elasticity, Capillarity.

Dynamics of Fluids. Barometer. Siphon. Pump.

Specific Gravity. Motion. Energy.

Heat. Conduction. Convection. Radiation. Thermometer.

Light. Sound.

Experiments will be conducted as far as possible with the simplest apparatus, and such as may be found in any school.

For those who desire it, a special course will be given on the use of Meteorological Instruments, and keeping of records. A course of lectures will also be given, on the more common atmospherical phenomena, such as rain, hail, snow, frost, dew, storms, etc.

Neither course presupposes any previous knowledge of the subject, but students will find it to their advantage to read beforehand Gage's Introduction to Physical Science. Those interested in Meteorology should note any atmospheric phenomena which may have come under their observation, and which might be made the subject of investigation.

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PHYSIOLOGY AND HYGIENE

Lecture I.—General outline of subject. Cells. Tissues, Functions. Gains and Losses of the Body.

Lecture II.—The Skeleton, with Structure of Bones and Joints. Hygienic Principles.

Lecture III.—The Heart and Circulation, with dissection and microscopic observation.

Lecture IV.—Respiration, with dissection and microscopic examination of Lungs and Lung Tissue.

Lecture V.—Changes in blood by respiration. In Air, Ventilation and general hygienic observations in relation thereto.

Lecture VI.—Digestive Organs and Digestion, with experiments in Foods by means of digestive fluids, illustrated by dissection and diagrams.

Lecture VII.—The Nervous System.

Lecture VIII.—Organs of the Senses. The Senses themselves.

Lecture IX.—Summing up of subject. General revision and remarks on unity of bodily structure throughout the animal kingdom.

Text-book: Martin's Human Body.

(E. J. L.)

PSYCHOLOGY

Two objects will be kept in view throughout the course. As far as possible the subjects will be treated experimentally so as to afford as much practice on psychological observation as possible. Secondly, only those subjects, which are of most importance to the teacher, will be considered. Psychology at present can offer only tentative conclusions to the teacher who asks for psychological laws on which he may base his methods. Consequently two things only may be expected by the teacher from the study of Psychology—practice in psychological observation and suggestions about methods.

Perhaps the best books to consult are James' Psychology (Holt & Co.—a most suggestive but somewhat unsystematic book); Sully's Teachers' Handbook of Psychology (Longmans & Co. or Appleton, 5s., valuable for its applications of psychological principles to educational problems); Lloyd Morgan's Psychology for Teachers (Arnold & Co., 3s. 6d.—an interesting study by a biologist from the teacher's standpoint); Titchener's An Outline of Psychology (Macmillan & Co., \$1.50—valuable for its suggestions about experiments, though it contains no educational references). Kirkpatrick's Inductive Psychology (50 cents—an introductory book, helpful to a beginner); Baldwin's Handbook of Psychology, 2 vols. (Macmillan or Holt & Co., 25s.—a convenient book for reference).

(W. C. M.)

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ZOÖLOGY AND ENTOMOLOGY

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- (A) ZOOLOGY.—Its relation to other Natural Sciences. Protoplasm. Cells and cellular tissue—kinds and functions. Animal history. Functions of Animals in nature. Group structure compared with human structure. Unity in variety of Forms. How to study Animals.
- (B) Laboratory Work.—External and Internal Anatomy. The dissection of typical forms—(1) a radiate, (2) a mollusk, (3) a fish, (4) an amphibian, (5) an arthropod, (6) a bird, (7) a mammal, (8) peculiar forms.—Study of alcoholic specimens.

The Laboratory Work will include the Muscular, Nervous, Bony, Digestive, Circulatory and Respiratory Systems, and also Special Senses and Organs.

- (C) Classification of our native animals—their habits—their relation to the human welfare.
- (D) Entomology.—Instruction will also be given in Insect life.—their forms and structure—metamorphoses—modes of development—food—habits—habitats—injuriousness to fruits, etc., or usefulness in nature—classification. How to collect and prepare specimens.
- (E) Students who may wish to learn how to preserve and stuff birds, etc., will be given a few elementary lessons.

The instructor would like persons intending to become members of his class to keep a record as far as possible of observations made in garden, field, woods, etc., before attending the Summer School, and have the same reported in the class room along with observations made during Field Work while at Summer School.

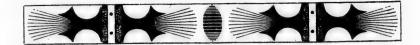
APPARATUS.—Each member of the class should have a sharp pocket-knife, a magnifying lens, a pair of small scissors, and a pair of forceps or tweezers.

(G. J. O.)

Mr. W. A. Hickman will be associated with Mr. Oulton in Zoology and Entomology. Mr. Hickman has made a very special study of birds and will, in connection with the work of the class, give special attention to birds and insects.

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Text Books

BOTANY—Gray's How Plants Grow (new edition), 75c.
Spotton's Botany (Parts I. and II.), \$1.25.
Gray's Manual, Gray's Structural Botany, Bessey's Botany.

CHEMISTRY—Williams' Introduction to Chemical Science, 75c. Williams' Laboratory Manual of General Science, 35c. Remsen's Organic Chemistry, \$1.20.

CIVICS--Bourinot's How Canada is Governed, \$1.00. Colby's Parliamentary Government in Canada, \$1.00. British Constitution (Old Small Leaflet), 5c. Constitution of United States (Old Small Leaflet), 5c. Fisk's Civil Government in United States.

EXPRESSION—Emerson's Evolution of Expression, Vol. I., 50c. Emerson's Evolution of Expression, Vol. II., 50c.

Geology—Schaler's First Book in Geology, \$1.25.
Dana's Geological Story Briefly Told, \$1.25.

MINERALOGY—Crosby's Rocks and Minerals.

Music—Curwen's Companion for Teachers, 30c. Curwen's Musical Theory, 10c.

PHYSICS—Gage's Introduction to Physical Science, \$1.40.

PHYSIOLOGY-Martin's Human Body, \$1.00.

PSYCHOLOGY-Lirdner's Empirical Psychology.

Zoology—Dawson's Handbook of Zoology, \$1.25. Colton's Practical Zoology, 90c.

MEMBERS

OF THE

Summer School of Science

SESSION 1896

Ashley, Mary Charlottetown, P.E.I.
Brehaut, AliceSummerside, P.E.I.
Brodie, Isabelle Halifax, N.S.
Cameron, A Yarmouth, N.S.
Cameron, Mrs. A Yarmouth, N.S.
Coldwell, A. E Wolfville, N.S.
Campbell, W. R Truro, N.S.
Cameron, Bertha A Parrsboro', N.S.
Colpitts, Jennie Moncton, N.B.
Donald, Mac, J Truro, N.S.
Duncan, J. M Charlottetown, P.E.I.
Dickieson, MaudParrsboro', N.S.
Donald, Mac, Mary Parrsboro', N.S.
Dench, Mabel Parrsboro', N.S.
Donald, Mac, Lena Ch'town, P.E.I.
Fullerton, Myrtle. Point de Bute, N.B.
Falkins, L. JSussex, N.B.
Gillis, Rena East Leicester, N.S.
Gillespie, Miss JParrsboro', N.S.
Gillespie, Alice Parrsboro', N.S.
Hilton, Aimee B Yarmouth, N.S.
Hall, J. B Truro, N.S.
Hickman, W. A Pictou, N.S.
Hockin, Leah Parrsboro', N.S.
Hatherley, Rose New Canaan, N.S.
Howe, Alva Parreboro', N.S.
Hatfield, Effie Parrsboro', N.S.
Hay, G. U St. John, N.B.
Hay, Mrs. G. USt. John, N.B.
Johnson, Florence EWindsor, N.S.
Kay, Mac, A Halifax, N.S.
Kay, Mac, T. C Parrsboro', N.S.
Killam, Minnie M. Victoria Mills, N.B.
Kinlay, Mac, Oressa Onslow, N.S.
Kirkpatrick, Lizzie R Parrsboro', N.S.
Kay, Mac, AgnesParrsboro', N.S.
Kay, Mac, Lily St. John, N.B.
Finhantsials Class Danishaus! N. C.

Lay, E. J Amberst, N.S.
Leitch, Fanny Parrsboro', N.S.
Lodge, Emma Port Howe, N.S.
Lyons, Estella Onslow, N.S.
Lay, Lucy Amherst, N.S.
Magee, W. H New Glasgow, N.S.
Morton, S. A
Moseley, Mary
Mullen, Mary O Parrsboro', N.S.
Milligan, Jessie St. John, N.B.
Neales, Julia Woodstock, N.B.
Patterson, Mrs. S. B Truro, N.S.
'Putnam, Charlotte Onslow, N.S.
Pye, Hannah Liscomb, N.S.
Pipes, Augusta Nappan Station, N.S.
Robinson, C. B Pictou, N.S.
Read, Mina A Truro, N.S.
Read, Alice M Port Elgin, N.B
Seaman, J. D Charlottetown, P.E.I.
Saunders, Amy Halifax, N.S.
Shipley, LauraNappan, N.S.
Spreule, Sarah L Parrsboro', N.S.
Sproule, Mary J Parrsbore', N.S.
Shipley, Lillian Nappan, N.S.
Snaddon, C. C Ch'town, P.E.I.
Starratt, S. A Yarmouth, N.S.
Trerice, Maud East Leicester, N S.
Theakston, L. Emmie Halifax, N.S.
Theakston, Frances Halifax, N.S.
Wood, Berton J Lakeville, N.S.
Wotton, Lillian Parrsboro', N.S.
Wotton, Ethel Parrsboro', N.S.
Wetmore Elizabeth Clifton, N. B.
Willis, Mrs
Woodworth, E Parrsboro', N.S.
Woodworth, Mary E. Parrsboro', N.S.
Woodworth, Mattie Parrsboro', N.S.

Time Table

Thursday, July 7th to Friday, July 22nd, 1897

8.00	5.00	3.00	11.00	11.00	9.00	A. M. 8.30 9.00	TIME
o Opening o Meeting	~ · · · · · · · · · · · · · · · · · · ·	÷		8 8	****	8 0 F	E THUR.
ng Round Table ng Talk	Field Work	English Literature	Botany Expression Physics and Meteorology Civics	Zoology Physiology Chemistry Music	Rindergarten Geology and Mineralogy	Physical Culture	R FRIDAT
	Excur	sion to	Tusket Lal	kes and Po	ort Maitlar	nd	SAT.
Star- gazing	Field Work	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy Kind Geo & Miner	Singing	MON.
Round Table Talk	Meteor Lecture	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy Kind Geo & Miner	Physic'l Culture	TUES.
Lecture	Field Work	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy. Kind Geo & Miner	Singing	WED.
Star- gazing	Field Work	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy Kind Geo & Miner	Physic'l Culture	THUR.
Round Table Talk	Meteor Lecture	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy Kind Geo & Miner	Singing	FRI.
		Ex	cursion to T	usket Islan	d		SAT.
Concert	Field Work	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy Kind Geo & Miner	Physic'l Culture	MON.
Star- gazing	Field Work	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy Kind Geo & Miner	Singing	TUES.
Round Table Talk	Meteor Lecture	Lit	Botany Exp Phy & Meteor Civics	Zoo Phys Chem Music	Psy Kind Geo & Miner	Physic'l Culture	WED.
Closing Meeting	Field Work	Lit	Botany Exp Phy & Meteor	Zoo Phys Chem Music	Psy Kind Geo & Miner	Singing	THUR.
	Examinations					Physic'l Cult ure	FRI.

t, N.S. o', N.S. e, N.S.

v, N.S.
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v, N.S.
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k, N.S.
o, N.S.
h, N.B.
k, N.B.
o, N.S.
w, N.S.
b, N.S.
n, N.S.

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n, N.B
P.E.I.
x, N.S.
n, N.S.
o', N.S.
o', N.S.
r, N.S.
r, N.S.
c, N.S

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